A third proposal relating to carnivorous plants was put forward by the USA to include all species of *Sarracenia* not already listed on Appendix I, on Appendix II. This was also approved by the Plant Working Group and adopted by the Conference of Parties. Table 2 shows the status of all carnivorous plants now listed on the Appendices of the Convention.

Table 2

Current status of carnivorous plants listed on the Appendices of CITES

Family	Appendix I	Appendix II
BYBLIDACEAE		Byblis spp.
CEPHALOTACEAE		Cephalotus follicularis
NEPENTHACEAE	Nepenthes rajah	All Nepenthes spp.
	Nepenthes khasiana	not already on Appendix I
SARRACENIACEAE	Sarracenia alabamensis	All Sarracenia spp.
	var. alabamensis	not already on Appendix I
	S. jonesii	
	S. oreophila	Darlingtonia californica

Assessment of Natural CP Populations by a Commercial Grower

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The following article is one in which I have considered writing for a number of years. It is not due to the difficulty in preparing an article for CPN, but in the subject matter. Back in the early 1970's, I initiated a strong conservation based policy in developing World Insectivorous Plants (WIP) and making its objectives based on commercial production of CP. My concerns for plant conservation were based on printed accounts that I had read on how the plants were being removed from their natural ancestral homelands by commercial companies (so-called field collectors) at an astronomical rate rapidly depleting them from the wild to the point of near extinction. I was horrified with the thought of commercial CP companies going out into the field and ripping plants out and stuffing them into a bag for resale. It did not seem ethical. It still isn't if the land is not owned, leased or the owner compensated for the change in the plant life. To get a firsthand look at the situation and to improve my understanding of CP populations, I made an extensive tour of the southeastern coastal areas of Mississippi to North Carolina in 1975.

When I first visited this CP belt, I was impressed with the quantity of plants in the field. Especially impressive was the Green Swamp in North Carolina. Even with all of the reported "rapes" by commercial companies, carnivores were easy to find along the roadways and in the natural forest areas. Having conversed with many of the "field collectors," they mentioned that there were so many plants in the Green Swamp that it would be decades before they would get scarce. They practiced a limited conservation program by taking only

the larger plants thus enabling seedlings to develop. They scattered seed when it was available. The fallacy of this is that since only mature plants are able to flower and set seed, their removal eliminates future seed production. Then something happened in Green Swamp. The timber companies began to expand their pine plantations.

Almost overnight, the CP populations were annihilated. The only thing green about the "green swamp" today is the color of the trees and the money coming in from their sale. It was the bulldozers that did in the CP's, not the collectors. Now don't get me wrong, I am not expousing the virtues of field collecting for profit, but I would like to point out that habitat destruction is by far the greater evil when comparing collecting to land transformation.

During the 1970's, pressure was put on companies who purchased or removed the majority of their plants from natural habitats to grow their own stock. In that the majority of these field collecting companies have since gone out of business, WIP and Sundew Environments were constantly expousing the benefits of buying greenhouse grown plants of which we more or less had a monopoly. Besides the obvious advantages of pest free and controlled plants, our selections were not limited to the plants in the field. To compete, we had to produce and sell plants at prices competitive with field pulled material. With the novelty of CP, coupled with the superb magazines available then (House Plants and Porch Gardens, Plants Alive, etc.) which touted CP, sales were brisk and they enabled a business to succeed. With the general decline in interest in houseplants in the late 1970's and continuing into the 80's, Sundew ceased operations. WIP continued on, mainly due to the efforts of WIP employees Ron Fleming and Jim Miller in getting Nepenthes into wide circulation. My specialty, high volume production techniques and systems development were hampered by the many moves that transpired over the years. Nevertheless, WIP managed to continue on a subsidized basis maintaining its conservation based ideals.

Most recently, a number of magazine articles in CPN and other publications have pointed out the ruthless destruction of natural habitats and the consequences that may follow. Television programs such as the famous Jacques Cousteau series and "Nature" have documented quite vividly the change in ocean life and the declining situation with tropical rainforests. The movie "Emerald Forest" portrayed the dying life of a tribe in Brazil that was forced to cope with massive environmental changes. Destruction of habitats will continue as underdeveloped countries use their easily obtained natural resources to pay their debts and supply the wealthy nations with low cost wood and meat products. It has been stated that for every quarterpound of hamburger obtained from cattle raised on former tropical forest (now grasslands), 15 square meters of virgin rain forest were destroyed. Rain forest soils are so poor that only a handful of cattle can be supported on an acre of the previously forested jungle.

This brings us to the point of this article. What can be done to change the tide? Long term, probably nothing; short term, something; I define long term as meaning centuries and short term decades. It has been established that retention of natural habitats is the only true way to save or even attempt to insure species survival. Therefore, all attempts should indirectly lead to this conclusion. Organizations such as the Nature Conservancy have begun to purchase natural areas and have a number of bogs under their jurisdiction. Our state, national forest and parks are supposedly protected, but government lands of any sort have limited protection due to the ease of access by citizens.

Since we are strictly interested in CP habitats, wouldn't it be prudent for CPN to be in a position to purchase bogs for the preservation of CP? To do so would require the financial aspects typical of most corporations, but it could be done if we all pull together. A little known fact is that because of the economics of printing, 2000 copies of CPN are printed for each issue. With the usual 700 to 800 members a year, over 1200 copies are stored each issue. If these 1200 copies were to be sold, CPN would be able to not only have more color photos and larger issues, but they could then consider paying for articles similar to other magazines. With more subscribers, land purchases could then be considered.

How can you help? If every member would get a new member each year, growth would be phenomenal. Is that too much to ask? CPN could give a free subscription to each member who gets five or ten new members. They could use this as a gift subscription or as a future subscription add-on. (Just an idea).

It would be nice for commercial CP specialty nurseries to purchase bogs and retain them as natural preserves or use them for plant production. Unfortunately, rare plants such as CP have a real restricted market appeal and that means limited sales. That is part of the reason why garden centers only stock one or two varieties of carnivores. It is only through the acquisition of new customers can CP firms stay in business. With this limited appeal, it is not economical for CP firms to stock all varieties of plants. Collectors will trade among themselves anyway to get something new. They will only use the commercial nursery when something new, different or rare is offered and that is getting exceedingly difficult today because of the wide assortment of plants that have been offered over the years (200+ by WIP alone since 1976).

Another fact needs to be presented. While CP interest is growing around the world, the US market is declining. This is not just my viewpoint but of others in the commercial trade. In addition, CP collectors are used to buying plants for a few dollars and have not accepted the true costs of growing rare plants on a commercial basis.

The problem is that most CP operations are run as "hobby businesses" and a side income for the operator. Consequently, profit and loss is of little importance. Because of the hobby nature of the nurseries, they are not able to provide financial assistance to protect natural habitats. However, there is something they and others can do. They could grow plants and replant natural habitats or increase the plant's range by planting them in areas that could support them. Unfortunately, our governmental agencies who have been created to protect the flora seem to be more interested in protecting their jobs by limiting plant colonies to their present locations. For instance, it would be easy for us living in the southeast to repopulate S. oreophila habitats that have been known in the past with our surplus plants. Growing 10,000 S. oreophila for transplanting is easy, yet we are stymied in our efforts. I would not recommend placing any plants on private lands unless you own them. Ideally, it might be best to use the US Forest Service, or state/national forest for "dumping grounds" but efforts to do so have been met with negative results. I have to agree with Faith Campbell of the National Resources Defense Council that the Federal Government is not really interested in saving restricted habitat plants such as CP. We, as avid plant collectors, have to pull together and do it on our own. So on to the next means of protection.

The last means of protecting the plants is the direct approach. That is for the private citizen to purchase natural habitats and act as a protector. This can be expensive, but it is effective. I have purchased a rather large bog myself and know of a few concerned collectors who have done likewise. Between us, we have diversified habitats that if retained will put off habitat destruction during our lifetime. Perhaps these new protected areas will be confiscated by the government under eminent domain powers because of future rarity of certain CP's. They say natural areas are being destroyed in the southeastern coastal areas (I have witnessed a remarkable change in only ten years), fifty years hence one may have difficulty in finding any plants.



Sarracenia drawing by Ron Fleming